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REMARKS

This application has been carefully reviewed in light of the Office Action of November 2, 2004, wherein:

- A. A restriction was made and an Election was required;
- B. The specification was objected to because of formalities;
- 10 C. Claims 24, 25, 27, 28, 31-36, 39-41, and 43-45 were objected to because of formalities;
- D. Claims 30-48 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention;
- 15 E. Claims 24 and 25 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting;
- F. Claim 24 was rejected under 35 U.S.C. §102(b) as being anticipated by Vitalis (U.S. 2,717,877);
- G. Claims 24 and 25 were rejected under 35 U.S.C. §102(b) as being anticipated
20 by Dawson (U.S. 3,617,211);
- H. Claim 25 was rejected under 35 U.S.C. §103(a) as being unpatentable over Vitalis as applied to Claim 24 above, and further in view of Dawson (U.S. 3,617,211);
- I. Claims 26-30, and 32-38 were rejected under 35 U.S.C. §103(a) as being
25 unpatentable over Vitalis as applied to Claim 24 above, and further in view of Kingsley, Jr. (U.S. 4,421,794);
- J. Claims 39-42 were rejected under 35 U.S.C. §103(a) as being unpatentable over Vitalis in view of Kingsley as applied to Claims 26-30 and 32-38 above, and further in view of Dawson (U.S. 3,617,211);
- 30 K. Claim 31 was rejected under 35 U.S.C. §103(a) as being unpatentable over Vitalis in view of Kingsley as applied to Claims 26-30 and 32-38 above, and further in view of Ellison et al (U.S. 4,136,636); and
- L. Claims 43-48 were rejected under 35 U.S.C. §103(a) as being unpatentable over Vitalis in view of Kingsley and Dawson as applied to Claims 39-42 above, in
35 further view of Ellison et al (U.S. 4,136,636).

5 **Restrictions/Elections**

A. Turning now to the Office Action, the Examiner required an election

The Examiner required an election to one of the following inventions under 35 U.S.C. 121:

- 10 I. Claims 1-23, and 49-74, drawn to an apparatus, classified in class 118, subclass 300; and
- II. Claims 24-48, drawn to a method, classified in class 427, subclass 345.

15 The Examiner stated that the inventions are distinct, each from the other because of the following reasons: Inventions II and I are related as process and apparatus for its practice, and the inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process.

20 (MPEP S 806.05(e)). In this case, the Examiner stated that the apparatus as claimed can be used for another and materially different process, such as cleaning a surface.

Because the Examiner concluded that these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different

25 classification, the Examiner is requiring a restriction for examination purposes.

The Examiner stated that during a telephone conversation with Mr. Tope-McKay on September 13, 2004, a provisional election was made with traverse to prosecute the invention of Group II, Claims 24-48. Accordingly and in affirmation, Claims 1-23, and

30 49-74 are withdrawn and an election is made without traverse to prosecute the invention of Group II, Claims 24-48.

Specification

B. The Examiner stated that the disclosure was objected to because of the following

35 informalities: at page 10, lines 12-15, reference to an Appendix A is provided. However,

5 the Examiner further stated that no Appendix A was provided with the application, thus making it impossible to understand what materials are referred to. The Examiner therefore required appropriate correction.

10 Accordingly, references to Appendix A have been removed in the above proposed replacement paragraph. Thus, the Applicant respectfully requests that the Examiner withdraw this objection.

Claim Objections

15 C. The Examiner stated that Claims 24, 25, 27, 28, 31-36, 39-41, and 43-45 were objected to because of the following informalities:

(1) The Examiner stated that in Claim 24, line 6, "remaining chemical solution" is referred to. However, earlier in the claim only "chemical mixture" or "chemical solute" is provided for basis. Also, in Claim 24, lines 5-6, "a substrate" should be "the substrate" for proper antecedent basis.

20 Claim 24 has been cancelled, with all of its limitations being incorporated into Claim 26. However, to address this objection, the pertinent material from Claim 24 has been amended to read, "...and removing the non-aqueous solvent from the wet substrate, leaving the a substrate with remaining chemical solute~~ion~~." The Applicant believes that the aforementioned amendments satisfy the referenced informalities. Thus, the Applicant respectfully requests that this objection be withdrawn.

30 (2) The Examiner stated that in Claim 25, the Applicant needs to provide actually using the selected applicator to apply the mixture for the claim to actually require the use of the applicator.

Claim 25 has been cancelled. Thus, the Applicant respectfully requests that this objection be withdrawn.

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5 (3) The Examiner stated that in Claim 27, it appears from the specification that the squeeze roller is used to remove the portion of the chemical mixture, not before the removing (see pages 10-11).

10 The pertinent parts of Claim 27 have been amended to read, "...wherein the act of removing a portion of the chemical mixture further comprises ~~comprising~~ an act of using a squeeze roller as a removal apparatus, ~~before the act of~~ for removing a portion of the chemical mixture from the wet substrate." The Applicant believes that the aforementioned amendments satisfy the referenced informalities. Thus, the Applicant respectfully requests that this objection be withdrawn.

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 (4) The Examiner stated that in Claim 28, it appears from the specification that the heat exchanger actually performs the evaporating and is not used prior to the claimed evaporating step (see page 11).

20 The pertinent parts of Claim 28 have been amended to read, "...wherein further ~~comprising an act of using a heat exchanger as an evaporator apparatus, before~~ the act of evaporating the non-aqueous solvent into a solvent vapor, further comprises an act of utilizing a heat exchanger as an evaporator apparatus for evaporating the non-aqueous solvent." The Applicant believes that the aforementioned amendments satisfy the
25 referenced informalities. Thus, the Applicant respectfully requests that this objection be withdrawn.

 (5) The Examiner stated that in Claim 31, the Applicant needs to actually provide using the blower to perform the preventing of vapors from escaping.

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 The pertinent parts of Claim 31 have been amended to read, "...wherein the act of preventing solvent vapor from escaping further comprises acts of utilizing a blower apparatus to create a negative pressure and prevent the vapor from escaping. further ~~comprising an act of selecting a blower apparatus before the act of preventing vapors~~
35 from escaping by creating a negative pressure, the blower apparatus being selected from a

5 ~~group consisting of a fan, and a blower.~~” The Applicant believes that the aforementioned amendments satisfy the referenced informalities. Thus, the Applicant respectfully requests that this objection be withdrawn.

10 (6) The Examiner stated that in Claim 32, it appears from the specification that the using of the separator occurs during the act of removing, not before (see page 13).

The pertinent parts of Claim 32 have been amended to read, “...wherein the act of removing solvent vapors further comprises an act of utilizing a separator for removing the solvent vapors, the separator further comprising an act of using a separator
15 comprising a mist eliminator and a high-efficiency separator, before the act of removing remaining solvent vapors.” The Applicant believes that the aforementioned amendments satisfy the referenced informalities. Thus, the Applicant respectfully requests that this objection be withdrawn.

20 (7) The Examiner stated that in Claim 33, there is no basis for the “removed non-aqueous solvent,” because Claim 30 refers to vapor.

The removed non-aqueous solvent refers to both removed solvent vapors as set forth in Claim 30, and solvent that is in the removed chemical mixture as set forth in
25 Claim 26. The chemical mixture that is removed in Claim 26 includes both solvent and solute, as set forth in Claim 24. The act as outlined in Claim 33 addresses collecting the removed solvent from both the solvent vapor and the removed chemical mixture. The Applicant apologizes for any confusion and has amended the pertinent parts of Claim 33 to read, “...further comprising an act of collecting any removed non-aqueous solvent, the
30 removed non-aqueous solvent being a combination of removed solvent vapor and solvent in the chemical mixture that was removed in the act of removing a portion of the chemical mixture from the wet substrate.” The Applicant believes that the aforementioned amendments satisfy the referenced informalities. Thus, the Applicant respectfully requests that this objection be withdrawn.

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5 (8) The Examiner stated that in Claim 34, lines 6-7, there is no support for “the portion of chemical mixture” being part of the condensed solvent vapor.

The “portion of the chemical mixture” is not part of the condensed solvent vapor. The “portion of the chemical mixture” was removed during the act of removing the non-
10 aqueous solvent from the wet substrate as set forth in Claim 26. The act of “collecting the condensed liquid solvent solution and the portion of the chemical mixture into a collected solution” references collecting both the liquid solvent solution as set forth in Claim 34 and the removed portion of the chemical mixture as set forth in Claim 26. The Applicant apologizes for the confusion and believes that with this clarification, the
15 Examiner will find support for “the portion of the chemical mixture.” Thus, the Applicant respectfully requests that this objection be withdrawn.

(9) The Examiner stated that in Claim 35, it appears that the water spray mechanism actually performs the condensing, not acts before the condensing.

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The pertinent parts of Claim 35 have been amended to read, “...wherein the act of condensing the solvent vapor into a condensed liquid solvent solution further comprises
~~comprising~~ an act of using a water spray mechanism as a condensing apparatus for ;
~~before the act of condensing the solvent vapor into a condensed liquid solvent solution.~~”
25 The Applicant believes that the aforementioned amendments satisfy the referenced informalities. Thus, the Applicant respectfully requests that this objection be withdrawn.

(10) The Examiner stated that in Claim 36, it appears that the heat exchanger performs the heating the collected solution, not acts before, and that there is also no
30 support for the “re-boiler” tank of line 2.

The pertinent parts of Claim 36 have been amended to read, “...wherein the act of heating the collected solution to vaporize the non-aqueous solvent into a re-vaporized non-aqueous solvent further comprises
~~comprising~~ an act of using a steam-based heat
35 exchanger as a ~~the heating method for the~~ re-boiler tank, ~~before the act of~~ for heating the

5 collected solution ~~to vaporize the non aqueous solvent into a re-vaporized non aqueous solvent.~~” The Applicant believes that the aforementioned amendments satisfy the referenced informalities. Thus, the Applicant respectfully requests that this objection be withdrawn.

10 (11) The Examiner stated that in Claim 39, the Applicant needs to provide actually using the selected applicator to apply the mixture for the claim to actually require the use of the applicator.

15 The pertinent parts of Claim 39 have been amended to read, “...wherein the act of applying the chemical mixture with the substrate further comprises ~~comprising~~ acts an act
of selecting an application apparatus ~~before the act of applying the chemical mixture with the substrate;~~ and utilizing the application apparatus for applying the chemical mixture with the substrate, where the application apparatus is selected from a group consisting of a foam applicator, spray applicator, and a padding applicator.” The Applicant believes
20 that the aforementioned amendments satisfy the referenced informalities. Thus, the Applicant respectfully requests that this objection be withdrawn.

(12) The Examiner stated that in Claim 40, it appears from the specification that the squeeze roller is used to remove the portion of the chemical mixture, not before the
25 removing (see pages 10-11).

The pertinent parts of Claim 40 have been amended to read, “...wherein the act of removing a portion of the chemical mixture further comprises ~~comprising~~ an act of using
a squeeze roller as a removal apparatus, ~~before the act of~~ for removing a portion of the
30 chemical mixture from the wet substrate.” The Applicant believes that the aforementioned amendments satisfy the referenced informalities. Thus, the Applicant respectfully requests that this objection be withdrawn.

5 (13) The Examiner stated that in Claim 41, it appears from the specification that the heat exchanger actually performs the evaporating and is not used prior to the claimed evaporating step (see page 11).

The pertinent parts of Claim 41 have been amended to read, "...wherein further
10 ~~comprising an act of using a heat exchanger as an evaporator apparatus, before the act of~~
evaporating the non-aqueous solvent into a solvent vapor-, further comprises an act of
utilizing a heat exchanger as an evaporator apparatus for evaporating the non-aqueous
solvent." The Applicant believes that the aforementioned amendments satisfy the
referenced informalities. Thus, the Applicant respectfully requests that this objection be
15 withdrawn.

(14) The Examiner stated that in Claim 43, the Applicant needs to actually provide using the blower to perform the preventing of vapors from escaping.

20 The pertinent parts of Claim 43 have been amended to read, "...wherein the act of
preventing solvent vapor from escaping further comprises acts of utilizing a blower
apparatus to create a negative pressure and prevent the vapor from escaping. further
~~comprising an act of selecting a blower apparatus before the act of preventing vapors~~
~~from escaping by creating a negative pressure, the blower apparatus being selected from a~~
25 ~~group consisting of a fan, and a blower.~~" The Applicant believes that the aforementioned
amendments satisfy the referenced informalities. Thus, the Applicant respectfully
requests that this objection be withdrawn.

(15) The Examiner stated that in Claim 44, it appears from the specification that
30 the using of the separator occurs during the act of removing, not before (see page 13).

The pertinent parts of Claim 44 have been amended to read, "...wherein the act of
removing solvent vapors further comprises an act of utilizing a separator for removing
the solvent vapors, the separator further comprising an act of using a separator
35 ~~comprising a mist eliminator and a high-efficiency separator, before the act of removing~~

5 ~~remaining solvent vapors.~~” The Applicant believes that the aforementioned amendments satisfy the referenced informalities. Thus, the Applicant respectfully requests that this objection be withdrawn.

10 (16) The Examiner stated that in Claim 45, it appears that the heat exchanger performs the heating the collected solution, not acts before.

The pertinent parts of Claim 45 have been amended to read, “...wherein the act of heating the collected solution to vaporize the non-aqueous solvent into a re-vaporized non-aqueous solvent further comprises ~~comprising~~ an act of using a steam-based heat
15 exchanger as a re-boiler tank, ~~before the act of for~~ heating the collected solution ~~to vaporize the non-aqueous solvent into a re-vaporized non-aqueous solvent.~~” The Applicant believes that the aforementioned amendments satisfy the referenced informalities. Thus, the Applicant respectfully requests that this objection be withdrawn.

20 The aforementioned amendments are made to satisfy informality objections and do not change the scope of the claims. Additionally, because these amendments are made to satisfy objections, they are not made for “statutory” reasons. Therefore, the proposed amendments should not affect the doctrine of equivalents, as *Festo* should not apply. See *Shoketsu Kinzoku Kogyo Kabushiki Co. v Festo Corp.*, 520 U.S. 1111 (1997). Thus, the
25 Applicant respectfully requests that the Examiner withdraw these objections.

Claim Rejections - 35 U.S.C. §112

D. Claims 30-48 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter
30 which applicant regards as the invention.

Claim 30

Regarding Claim 30, the Examiner stated that in lines 2-3, it was confusing as to what is required, since the claim requires both preventing vapors from escaping and
35 removing the vapors. Furthermore, the Examiner stated that it was unclear where the

5 “remaining” solvent vapors come from. Also, the Examiner stated that at lines 1-2 “an act: of preventing” should apparently be “an act of preventing.”

The Applicant responds to the rejection by pointing out that Claim 26 describes evaporating the non-aqueous solvent into a solvent vapor, while Claim 30 describes
10 creating a negative pressure to prevent the solvent vapor from escaping, and then removing the solvent vapor. The removed solvent vapor is thereafter described as being condensed and collected as set forth in Claim 34. To clarify the claim, the pertinent parts of Claim 30 have been amended to read, “...further comprising acts of: an act: of
15 preventing solvent vapor vapors from escaping by creating a negative pressure; and removing the solvent vapor. ~~remaining solvent vapors.~~” The Applicant apologizes for any confusion and believes that the aforementioned amendments remove any indefinite issues. Thus, the Applicant respectfully requests that this rejection be withdrawn.

Claims 31 and 43

20 Regarding Claims 31 and 43, the Examiner stated that it is confusing as to how the “blower apparatus” could be either a fan or a blower, since it would appear that the “blower” would be either “blower” or not.

As described by the *The American Heritage® Dictionary of the English*
25 *Language, Fourth Edition*, a fan is a blower. The Applicant apologizes for the confusion and has amended the pertinent parts of Claims 31 and 43 to read, “...wherein the act of preventing solvent vapor from escaping further comprises acts of utilizing a blower apparatus to create a negative pressure and prevent the vapor from escaping. further
30 ~~comprising an act of selecting a blower apparatus before the act of preventing vapors from escaping by creating a negative pressure, the blower apparatus being selected from a group consisting of a fan, and a blower.~~” The aforementioned amendment was made to clarify Claims 31 and 43 and does not change the scope of the claims. Additionally, the Applicant believes that the amendments remove any indefinite issues and respectfully requests that this rejection be withdrawn.

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5 **Double Patenting**

E. The Examiner stated that Claims 24 and 25 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 12-14 of copending Application No. 10/611,746.

10 The Examiner further stated that although the conflicting claims are not identical, they are not patentably distinct from each other because claims 12-14 of '746 (which depends from claim 2 and through claim 2, parent claim 1) requires all the features of claims 24 and 25 and more. A chemical mixture is formed comprising a non-aqueous solvent (the NPB) and a chemical solute (the fluorine containing compositions), this is
15 applied to a substrate by foaming or spraying to form a wet substrate, and then the non-aqueous solvent is removed from the wet substrate, leaving the substrate with remaining chemical solution. The Examiner made provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

20 Claims 24 and 25 have been cancelled. Thus, the Applicant respectfully requests that the Examiner withdraw this provisional double patenting rejection.

Claim Rejections - 35 U.S.C. §102

F. Claim 24 was rejected under 35 U.S.C. 102(b) as being anticipated by Vitalis
25 (U.S. 2,717,877).

Regarding Claim 24, the Examiner stated that Vitalis teaches a method for applying a chemical solution to a substrate; a chemical mixture being formed comprising a non-aqueous solvent (isopropanol and perchloroethylene) and a chemical solute
30 (sodium bisulfite-addition product); the chemical mixture being applied to a substrate of fabric to form a wet substrate; the non-aqueous solvent being removed from the wet substrate; and leaving a substrate with remaining chemical solution. Column 14, lines 55-67 (the squeeze rolls, followed by heating).

5 Claim 24 has been cancelled. Thus, the Applicant respectfully requests that the Examiner withdraw this rejection.

G. Claims 24-25 were rejected under 35 U.S.C. 102(b) as being anticipated by Dawson (U.S. 3,617,211).

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 The Examiner stated that Dawson teaches a method for applying a chemical solution to a substrate; a chemical mixture being formed comprising a non-aqueous solvent (phenoxyethanol, ethylene carbonate and ethylene glycol monomethyl ether) and a chemical solute (Nabor Orange R base); the chemical mixture being applied to a
15 substrate of fabric to form a wet substrate; the non-aqueous solvent being removed from the wet substrate; and leaving a substrate with remaining chemical solution. Column 7, lines 1-10 (the squeeze rollers, followed by heating).

 Regarding Claim 25, the Examiner stated the Dawson teaches that the coating can
20 be by padding, which would require the presence of a padding applicator. Column 7, lines 1-10.

 Claims 24 and 24 have been cancelled. Thus, the Applicant respectfully requests that the Examiner withdraw this rejection.

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Claim Rejections - 35 U.S.C. §103

H. Claim 25 was rejected under 35 U.S.C. 103(a) as being unpatentable over Vitalis as applied to claim 24 above, and further in view of Dawson (US 3617211).

30 Claim 25 has been cancelled. Thus, the Applicant respectfully requests that the Examiner withdraw this rejection.

I. Claims 26-30, and 32-38 were rejected under 35 U.S.C. 103(a) as being unpatentable over Vitalis as applied to Claim 24 above, and further in view of Kinsley, Jr.
35 (U.S. 4,421,794).

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The four factors relevant to determining obviousness are: 1) the scope and content of the prior art, 2) the differences between the prior art and the Claims at issue, 3) the level of ordinary skill in the art when the invention was made, and 4) secondary indicia, such as commercial success and copying. *Graham v. John Deere Co.*, 383 U.S. 1, 17, 86 S.Ct. 684, 694, 15 L.Ed.2d 545 (1966). In addition, an examiner addressing obviousness must not take a “piecemeal approach, one in which [the examiner] takes the individual elements, item by item, and tries to show us that they each exist somewhere in the prior art. ‘That all elements of an invention may have been old (the normal situation), some old and some new, or all new, is ... simply irrelevant.’” *Litton Systems*, 728 F.2d at 1443 (quoting *Environmental Designs Ltd. v. Union Oil Co. of California*, 713 F.2d 693, 698 (Fed.Cir.1983)); see also *Avia*, 853 F.2d at 1564 (“That some components of [the challenged patent] exist in prior art references is not determinative. ‘[I]f the combined teachings suggest only components of the Claimed design but not its overall appearance, a rejection under section 103 is inappropriate.’”) (quoting *In re Cho*, 813 F.2d 378, 382 (Fed.Cir.1987)).

The Examiner stated that Vitalis teaches all the features of these claims, as discussed in the 35 USC 102(b) rejection using Vitalis above, except the solvent removing features. The Examiner further stated that Vitalis does teach using squeeze rollers to remove a portion of the chemical mixture from the wet substrate prior to evaporating solvent from the substrate by heating, as required by Claims 26-27. The Examiner also stated that Kinsley teaches a method for removing non-aqueous solvent from a substrate, which substrate can be paper or a fabric, and that after a substrate has been coated with a chemical mixture of a coating material and a solvent, the solvent is to be removed. The Examiner further stated that Kinsley teaches a coated substrate being passed into a chamber which can be at reduced pressure, which would lower a boiling point of the solvent; then the non-aqueous solvent is evaporated into a solvent vapor; with a steam based heat exchanger being used to evaporate the solvent (the steam is a heat exchanger heating the solvent). The Examiner also stated that Kinsley teaches vapors being prevented from escaping to the extent that a negative pressure is created, with the

5 solvent vapors that have been evaporated into the steam being removed from the system.
Further, the Examiner stated that removed solvent is collected; that the collecting can
include pushing the solvent vapor into a scrubber chamber (the condensing and
distillation/decanting); that this would occur via the negative pressure, since such
pressure is present; that the vapor is condensed into a condensed liquid solvent solution;
10 that this is collected and then heated to re-vaporize the solvent, the re-vaporized solvent
then being cooled and condensed to a re-condensed solvent, which is collected (the
condensing and distillation/decanting); that a water mechanism is used as a condenser
apparatus; that a separator can be present in the process to provide optimal steam which
would remove mist, since water is removed; and that this system provides for a easy and
15 efficient removal of solvent.

The Examiner concluded that it would have been obvious to one of ordinary skill
in the art at the time the invention was made to modify Vitalis to use a steam heated
system solvent removal system as the oven after squeeze rolling as shown by Kinsley,
20 with an expectation of providing a desirable coated fabric, because Vitalis teaches to coat
a fabric followed by squeezing to remove excess solvent and heating in a steam oven, and
Kinsley teaches that a desirable application method when coating fabric with a solvent
containing material is to heat in an oven and contact with steam to remove solvent from
the coating to provide an easy and efficient removal of solvent. The Examiner further
25 concluded that it would further have been obvious to use a water spray mechanism to
condense the solvent vapor as in Claim 35 in the process of Vitalis in view of Kinsley
with an expectation of desirable coating results, because Kinsley teaches to condense by
adding cold water, which would be inclusive of adding the cold water by spraying. The
Examiner also concluded that it would further have been obvious to modify Vitalis in
30 view of Kinsley to use a steam heat based exchanger to heat the "re-boiler tank" in the
processes of distillation/decanting as in Claim 36 with an expectation of providing
desirable heating, because Kinsley teaches distillation/decanting of the recovered solvent
vapors and such a process would require heating in a "tank," and Kinsley further teaches
heating with steam, such that steam would be present to provide heating. The Examiner
35 further stated that it would have been obvious to modify Vitalis in view of Kinsley to

5 provide pumping of the recovered solvent from a recovery tank (which would be provided to hold the recovered solvent) to a mix tank to be provided with the material to be coated and that this mix is further pumped to the application apparatus as in Claims 37-38, because Kinsley provides for solvent recovery, complete with distillation/decanting which provides a clean solvent that allows for reuse, and it would
10 be obvious to provide for reuse in the coating system itself or an another applicator of the coating system to allow cost savings on solvent.

In order to present a prima facie case of obviousness, the Examiner must provide (1) one or more references (2) that were available to the inventor and (3) that teach (4) a
15 suggestion to combine or modify the references, (5) the combination or modification of which would appear to be sufficient to have made the claimed invention obvious to one of ordinary skill in the art.

The Examiner has misinterpreted Kinsley. Kinsley uses a steam heated oven with
20 a steam spray to remove the solvent vapors. See Kinsley, Col. 7, lines 5-22. In Kinsley, the treated fabric is actually passed through the oven, with superheated steam inside the oven blasting the fabric to evaporate the solvent vapor. See Kinsley, Col. 8, lines 39-43. Kinsley is to be contrasted with the present invention, where the solvent vapor is evaporated by passing the treated substrate over an evaporator apparatus. See Present
25 Application, page 11, lines 10-22. As shown in FIGS. 1 and 2 of the present application, the evaporator apparatus operates as a heat plate, where the substrate passes over the heat plate to evaporate the solvent vapor. As further discussed in the specification of the present application, the evaporator apparatus may be heated using steam. Although both inventions use steam, the steam in Kinsley is sprayed through the substrate to evaporate
30 the solvent vapor, whereas the steam in the present invention is used to heat the heating plate (i.e., evaporator apparatus).

To further clarify the differences between Kinsley and the present invention, the pertinent parts of Claim 26 have been amended to read, "evaporating the non-aqueous
35 solvent into a solvent vapor by passing the substrate with remaining chemical mixture by

5 and against an evaporator apparatus, such that the evaporator apparatus operates as a heat
plate to evaporate the non-aqueous solvent into a solvent vapor.”

10 For reasons stated above, a combination of Kinsley with Vitalis does not teach all
of the limitations of the claimed invention. Also, even if the combination did teach the
present invention, the references must include a suggestion to combine or modify the
references to arrive at the claimed invention, which they do not.

15 In conclusion, regarding Claim 26, because Kinsley and Vitalis do not teach
all of the limitations of the claimed invention, nor do they include a suggestion to
combine or modify the references, the Applicant respectfully requests that the
Examiner withdraw this rejection of Claim 26

20 Regarding Claims 27-30, and 32-38, the Applicant refers the Examiner to the
comments above regarding Claim 26. As the inventions of Kinsley and Vitalis (neither
alone nor in combination) teach all of the limitations of Claim 26, the Applicant believes
that Claims 27-30, and 32-38, which depend therefrom, are also allowable. Thus, the
Applicant respectfully requests that this rejection be withdrawn.

25 J. Claims 39-42 were rejected under 35 U.S.C. 103(a) as being unpatentable over
Vitalis in view of Kinsley as applied to Claim 26-30 and 32-38 above, and further in view
of Dawson (U.S. 3,617,211).

30 The Examiner stated that Vitalis in view of Kinsley teaches all the features of
these claims except the padding applicator. However, the Examiner stated, Dawson
teaches a method for applying a chemical solution to a substrate; a chemical mixture
being formed comprising a non-aqueous solvent (phenoxyethanol, ethylene carbonate and
ethylene glycol monomethyl ether) and a chemical solute (Nabor Orange R base); the
chemical mixture being applied to a substrate of fabric to form a wet substrate; the non-
35 aqueous solvent being removed from the wet substrate, leaving a substrate with

5 remaining chemical solution (the squeeze rollers, followed by heating); and that the coating can be by padding, which would require the presence of a padding applicator. The Examiner concluded that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Vitalis in view of Kinsley to use a padding applicator as shown by Dawson, with an expectation of providing a desirable
10 coated fabric, because Vitalis in view of Kinsley teaches to coat a fabric followed by squeezing to remove excess solvent and heating, and Dawson teaches that a desirable application method when coating fabric to be followed by squeezing to remove excess solvent and heating is padding.

15 The Applicant refers the Examiner to the comments above regarding Claims 26-30, and 32-38. As the inventions of Kinsley and Vitalis (neither alone nor in combination) teach all of the limitations of Claims 26-30, and 32-38, the Applicant believes that Claims 39-42, which depend therefrom, are also allowable. Thus, the Applicant respectfully requests that this rejection be withdrawn.

20

K. Claims 31 was rejected under 35 U.S.C. 103(a) as being unpatentable over Vitalis in view of Kinsley as applied to Claim 26-30 and 32-38 above, and further in view of Ellison et al (US 4136636).

25 The Examiner stated that Vitalis in view of Kinsley teaches all the features of these claims except the blower. However, the Examiner further stated that Ellison teaches that when moving a coated substrate through an oven area it is known to use a fan to establish a slightly negative pressure because the fan causes inward gas flow, and would prevent vapors from escaping. The Examiner concluded that it would have been
30 obvious to one of ordinary skill in the art at the time the invention was made to modify Vitalis in view of Kinsley to use a blower fan as shown by Ellison, with an expectation of providing a desirable coated fabric, because Vitalis in view of Kinsley teaches to coat a fabric followed by squeezing to remove excess solvent and then passage into an oven with a negative pressure, and Ellison teaches that providing fans at an oven entrance to

5 provide a negative pressure. The Examiner concludes that as the negative pressure pulls gases in, it would prevent vapors from exiting.

The Applicant refers the Examiner to the comments above regarding Claims 26-30, and 32-38. As the inventions of Kinsley and Vitalis (neither alone nor in
10 combination) teach all of the limitations of Claims 26-30, and 32-38, the Applicant believes that Claim 31, which depends partially therefrom, is also allowable. Thus, the Applicant respectfully requests that this rejection be withdrawn.

L. Claims 43-48 were rejected under 35 U.S.C. 103(a) as being unpatentable over
15 Vitalis in view of Kinsley and Dawson as applied to Claim 39-42 above, and further in view of Ellison et al. (U.S. 4,136,636).

The Examiner stated that Vitalis in view of Kinsley and Dawson teaches all the features of these claims except the blower. However, the Examiner further stated that
20 Ellison teaches that when moving a coated substrate through an oven area it is known to use a fan to establish a slightly negative pressure, causes inward gas flow, and would prevent vapors from escaping. The Examiner concluded that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Vitalis in view of Kinsley and Dawson to use a blower fan as shown by Ellison, with an
25 expectation of providing a desirable coated fabric, because Vitalis in view of Kinsley teaches to coat a fabric followed by squeezing to remove excess solvent and then passage into an oven with a negative pressure, and Ellison teaches that providing fans at an oven entrance to provide a negative pressure. The Examiner concluded that as the negative pressure pulls gases in, it would prevent vapors from exiting.

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The Applicant refers the Examiner to the comments above regarding Claims 26-30, and 32-38. As the inventions of Kinsley and Vitalis (neither alone nor in combination) teach all of the limitations of Claims 26-30, and 32-38, the Applicant believes that Claims 43-48, which depends therefrom, are also allowable. Thus, the
35 Applicant respectfully requests that this rejection be withdrawn.

5 **Concluding Remarks:**

The Applicant respectfully submits that in light of the above comments and remarks, all claims are now in allowable condition. The Applicant thus respectfully requests timely allowance of all of the pending claims.

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In the event the Examiner wishes to discuss any aspect of this response, or believes that a conversation with either Applicant or Applicant's representative would be beneficial the Examiner is encouraged to contact the undersigned at the telephone number indicated below.

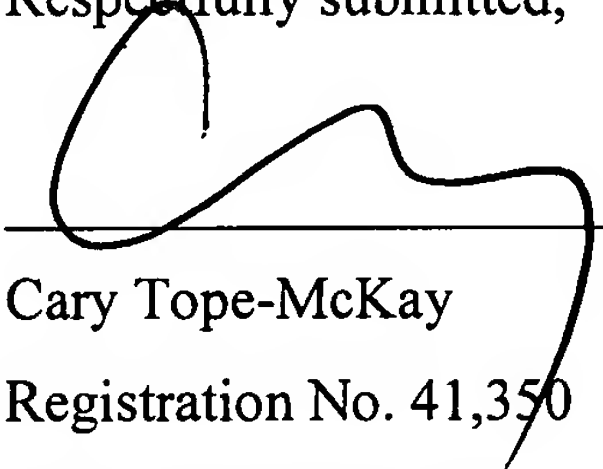
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The Commissioner is authorized to charge any additional fees which may be required or credit overpayment to deposit account no. 50-2691. In particular, if this response is not timely filed, the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136(a) requesting an extension of time of the number of months necessary to make this response timely filed. The petition fee due in connection therewith may be charged to deposit account no. 50-2691.

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Respectfully submitted,

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